



Performance Data Sheet

VSC5556BNA

General Information

| | | | |
|-----------------------|--------------------------|---------------------------------|-------------|
| Model | VSC5556BNA | Refrigerant | R-410A |
| Test Condition | ARI | Performance Test Voltage | 230V ~ 60HZ |
| Return Gas | 18.3°C (65°F) RETURN GAS | Motor Type | PSC |

Performance Information

| Evap Temp (°F) | Condensing Temperature (°F) | | | | | | | |
|----------------|-----------------------------|-------|-------|-------|-------|-------|-------|-------|
| | | 80 | 90 | 100 | 110 | 120 | 130 | 140 |
| -15 | Btu/h | 18200 | 15600 | | | | | |
| | Watts | 3080 | 3350 | | | | | |
| | Amps | 13.6 | 15.5 | | | | | |
| | Lb/h | 220 | 198 | | | | | |
| -10 | Btu/h | 22000 | 19500 | 17000 | | | | |
| | Watts | 3110 | 3400 | 3770 | | | | |
| | Amps | 13.6 | 15.4 | 17.5 | | | | |
| | Lb/h | 265 | 245 | 227 | | | | |
| -5 | Btu/h | 26000 | 23400 | 20900 | 18400 | | | |
| | Watts | 3130 | 3430 | 3810 | 4300 | | | |
| | Amps | 13.6 | 15.4 | 17.5 | 19.9 | | | |
| | Lb/h | 310 | 292 | 276 | 257 | | | |
| 0 | Btu/h | 30000 | 27400 | 24800 | 22300 | 19500 | | |
| | Watts | 3140 | 3450 | 3840 | 4320 | 4910 | | |
| | Amps | 13.5 | 15.3 | 17.4 | 19.7 | 22.5 | | |
| | Lb/h | 356 | 339 | 325 | 308 | 286 | | |
| 5 | Btu/h | 34200 | 31500 | 28900 | 26200 | 23400 | | |
| | Watts | 3130 | 3450 | 3850 | 4340 | 4930 | | |
| | Amps | 13.5 | 15.3 | 17.3 | 19.6 | 22.3 | | |
| | Lb/h | 402 | 388 | 374 | 359 | 339 | | |
| 10 | Btu/h | 38500 | 35800 | 33100 | 30300 | 27300 | 24000 | 20100 |
| | Watts | 3110 | 3450 | 3850 | 4340 | 4930 | 5620 | 6440 |
| | Amps | 13.4 | 15.2 | 17.2 | 19.5 | 22.2 | 25.4 | 29.2 |
| | Lb/h | 451 | 437 | 426 | 412 | 394 | 368 | 331 |
| 15 | Btu/h | 43200 | 40300 | 37500 | 34600 | 31400 | 27900 | 23800 |
| | Watts | 3080 | 3430 | 3840 | 4340 | 4920 | 5600 | 6410 |
| | Amps | 13.3 | 15.1 | 17.1 | 19.3 | 22.0 | 25.2 | 28.9 |
| | Lb/h | 501 | 489 | 479 | 466 | 449 | 425 | 390 |
| 20 | Btu/h | 48100 | 45100 | 42100 | 39000 | 35700 | 32000 | 27700 |
| | Watts | 3040 | 3400 | 3830 | 4320 | 4900 | 5580 | 6370 |
| | Amps | 13.2 | 15.0 | 17.0 | 19.2 | 21.9 | 25.0 | 28.7 |
| | Lb/h | 555 | 544 | 534 | 523 | 507 | 484 | 450 |

| | | | | | | | | |
|----|-------|-------|-------|-------|-------|-------|-------|-------|
| 25 | Btu/h | 53400 | 50200 | 47000 | 43800 | 40300 | 36300 | 31800 |
| | Watts | 2990 | 3370 | 3800 | 4300 | 4880 | 5550 | 6330 |
| | Amps | 13.1 | 14.9 | 16.9 | 19.1 | 21.7 | 24.8 | 28.5 |
| | Lb/h | 612 | 602 | 593 | 583 | 568 | 546 | 513 |
| 30 | Btu/h | 59100 | 55700 | 52300 | 48900 | 45100 | 40900 | 36200 |
| | Watts | 2930 | 3330 | 3770 | 4270 | 4850 | 5520 | 6280 |
| | Amps | 13.0 | 14.8 | 16.7 | 19.0 | 21.6 | 24.6 | 28.3 |
| | Lb/h | 674 | 664 | 656 | 646 | 632 | 611 | 579 |
| 35 | Btu/h | 65200 | 61600 | 58000 | 54300 | 50300 | 45900 | 40800 |
| | Watts | 2870 | 3280 | 3730 | 4240 | 4820 | 5480 | 6230 |
| | Amps | 12.8 | 14.6 | 16.6 | 18.8 | 21.4 | 24.5 | 28.1 |
| | Lb/h | 740 | 731 | 723 | 714 | 701 | 680 | 649 |
| 40 | Btu/h | 71900 | 68000 | 64200 | 60200 | 55900 | 51200 | 45800 |
| | Watts | 2790 | 3220 | 3690 | 4200 | 4780 | 5440 | 6180 |
| | Amps | 12.6 | 14.4 | 16.4 | 18.7 | 21.3 | 24.3 | 27.9 |
| | Lb/h | 812 | 803 | 795 | 786 | 773 | 753 | 723 |
| 45 | Btu/h | 79100 | 74900 | 70800 | 66500 | 61900 | 56900 | 51200 |
| | Watts | 2720 | 3160 | 3640 | 4160 | 4740 | 5390 | 6130 |
| | Amps | 12.4 | 14.2 | 16.3 | 18.5 | 21.1 | 24.2 | 27.7 |
| | Lb/h | 889 | 880 | 873 | 864 | 851 | 832 | 802 |
| 50 | Btu/h | 86900 | 82400 | 78000 | 73400 | 68500 | 63100 | 57100 |
| | Watts | 2640 | 3100 | 3590 | 4120 | 4700 | 5350 | 6070 |
| | Amps | 12.1 | 14.0 | 16.1 | 18.4 | 21.0 | 24.0 | 27.6 |
| | Lb/h | 973 | 964 | 957 | 948 | 935 | 915 | 886 |
| 55 | Btu/h | 95300 | 90600 | 85800 | 80800 | 75600 | 69800 | 63400 |
| | Watts | 2550 | 3040 | 3540 | 4080 | 4660 | 5300 | 6020 |
| | Amps | 11.8 | 13.8 | 15.9 | 18.2 | 20.8 | 23.9 | 27.4 |
| | Lb/h | 1060 | 1050 | 1050 | 1040 | 1030 | 1010 | 976 |

| COEFFICIENTS | CAPACITY | POWER | CURRENT | MASS FLOW |
|--------------|---------------|---------------|---------------|---------------|
| C1 | 7.379248E+04 | 2.119454E+03 | -3.476040E+00 | 8.782279E+02 |
| C2 | 8.281616E+02 | -6.016132E+01 | -5.424755E-02 | 7.091695E+00 |
| C3 | -9.894973E+02 | 1.211954E+01 | 3.568071E-01 | -1.446220E+01 |
| C4 | 7.159563E+00 | -3.712453E-01 | -1.358744E-03 | 5.394604E-02 |
| C5 | 7.693431E-01 | 1.195846E+00 | 1.416563E-03 | 2.064601E-02 |
| C6 | 7.610882E+00 | -1.617379E-01 | -3.062834E-03 | 1.385222E-01 |
| C7 | 6.587195E-02 | 1.423185E-03 | -2.238343E-06 | 7.950803E-04 |
| C8 | -5.087870E-02 | 1.247977E-03 | 1.315600E-05 | -3.805237E-04 |
| C9 | -1.106116E-02 | -5.560627E-03 | -1.052756E-05 | 7.029626E-05 |
| C10 | -2.610198E-02 | 2.123659E-03 | 1.578520E-05 | -4.927035E-04 |

$$\text{Value} = C1 + C2 * Te + C4 * Te^2 + C7 * Te^3 + (C3 + C5 * Te + C8 * Te^2) * Tc + (C6 + C9 * Te) * Tc^2 + C10 * Tc^3$$

Te = Evaporator Temperature

Tc = Condensing Temperature